

CLAIMS AMENDMENT PAPER

In response to PTO Office Action dated 01/10/2005

Please cancel claims 2, 7, 13, 14, 16, and 25. In addition, please amend the claims as outlined in the following current listing of claims, including the addition of new claims 30 and 31.

Current Listing of Claims

I claim:

1. (Currently Amended) An apparatus comprising:

a mold having at least one side wall defining an interior portion ~~and an injector port whereby an extrudable material may be injected~~, said mold having an opening for injecting material into said interior portion; and

a member ~~whereby said member is in sealable connection about~~ with said interior portion; ~~said member capable of moving along said interior portion of said mold whereby said member may~~ for adjustably controlling a the density of said extrudable the material.

2. (Canceled)

3. (Currently Amended) The apparatus of Claim ~~18~~ 1, wherein said controlling member comprises a backpressure piston.

4. (Currently Amended) The apparatus of Claim ~~18~~ 1, wherein said member ~~that adjustably controls a the density~~ further comprises a piston capable of sliding at variable speed along said interior portion for controlling the density of the material.

5. (Currently Amended) The apparatus of Claim ~~20~~ 4, wherein said member further comprises a combination of at least one gear and ~~for~~ at least one brake, wherein said combination engages said piston for adjustably controlling the density of the material.

6. (Currently Amended) The apparatus of Claim ~~20~~ 4, further comprising a ~~mech~~ valve means to shutoff the flow of positioned upstream from said mold, said material valve means further actuating to allow flow when said mold is empty or block flow when said mold is full.

7. (Canceled).

8. (Currently Amended) The apparatus of Claim ~~18~~ 1, further having said mold with at least one end confining said interior portion, wherein said end mold further comprises a rod

~~on or about said at least one end, slidingly connected therefrom.~~

9. (Currently Amended) The apparatus of Claim ~~24~~ 8, wherein said ~~end and rod are~~ is pushed outwardly as the mold fills, ~~and the~~ whereby the outward end position of said rod is detected by ~~the~~ a sensor ~~when~~ as said mold is filled or substantially filled, said sensor further actuating said valve means.

10. (Currently Amended) The apparatus of Claim ~~18~~ 1, further comprising a means to shut off the flow of ~~said~~ the injected material when said mold is filled or substantially filled and a means to divert ~~said~~ the material to another mold that is not filled.

11. (Currently Amended) The apparatus of Claim ~~26~~ 10, wherein said means comprises a diverter valve means.

12. (Currently Amended) The apparatus of Claim ~~27~~ 11, wherein said means further comprises a first diverter station and a second diverter station.

13-14 (Canceled)

15 (Currently Amended) The apparatus of Claim ~~12~~ 1, further comprising:
a means to shut off the flow of ~~said~~ the injected material when said mold is filled or substantially filled.

16 (Canceled)

17. (Currently Amended) An apparatus for making a ~~molded~~ member in a mold comprising:

~~a Banbury mixer or other open~~ a chamber mixer for mixing the materials;

~~at least one mold that has sides and ends that can be closed;~~

an extruder for filling ~~said~~ the mold with ~~said~~ the mixed materials;

a member ~~that~~ for adjustably ~~controls~~ controlling a the density of ~~said~~ the materials as the mold is filled;

~~a valve to shut off the flow of said mixed materials when said mold is filled;~~

~~a tail stop and/or sensor to indicate when said valve should shut; and~~

~~a water bath for cooling said mold or molds.~~

a valve means capable of allowing flow when the mold is empty and blocking flow when the mold is full; and

an indicator means for sensing material in the mold thereby actuating said valve means.

18. (Currently Amended) The apparatus of Claim ~~55~~ 17, ~~further comprising: wherein, the~~ members are molded in a plurality of molds.

19. (Currently Amended) The apparatus of Claim ~~55~~ 17, further comprising ~~a means to shut off the flow of said injected material when at least on mold is~~ said valve means to block the flow of the material to the mold that is filled or substantially filled and a means to divert said material to divert the flow to a mold that is not filled .

20. (Currently Amended) The apparatus of Claim ~~55~~ 19, wherein said means comprises a diverter valve.

21. (Currently Amended) The apparatus of Claim ~~58~~ 19, wherein said means further comprises a first diverter station and a second diverter station.

22. (Currently Amended) The apparatus of Claim ~~55~~ 17, wherein ~~said~~ the mold further comprises at least one end confining the materials and a sliding rod ~~which extends~~ extending outward from said ~~one~~ end of ~~said~~ the mold, ~~and is~~ said sliding rod moving pushed outwardly as ~~said~~ the mold is filled.

23. (Currently Amended) The apparatus of Claim ~~60~~ 22, wherein said rod, in its outward end position, is detected by a sensor when ~~said~~ the mold is full or substantially full.

24. (Currently Amended) The apparatus of Claim ~~61~~ 23, wherein said sensor actuates said valve means ~~causes the mold to close~~ closing the mold that is filled or substantially filled and diverting the material to another mold that is not filled.

25. (Canceled)
26. (Currently Amended) The apparatus of Claim ~~60~~ 17, having means to push said rod inwardly and push the member out of the mold after said member is formed.
27. (Currently Amended) The apparatus of Claim ~~66~~ 26, further comprising a cooling rack.
28. (Currently Amended) The apparatus of Claim ~~65~~ 17, further comprising a texturing member.
29. (Currently Amended) The apparatus of Claim ~~55~~ 17, wherein said ~~controlling~~ member that adjustably controls the density comprises at least one piston, one gear and ~~at least one~~ brake.
30. (New) The apparatus of Claim 17, further comprising a cooling bath for cooling the mold or molds.
31. (New) The apparatus of Claim 17, further having means to put the mold into the cooling bath and means to take the mold out of the cooling bath.